

ENSIGN

Directional

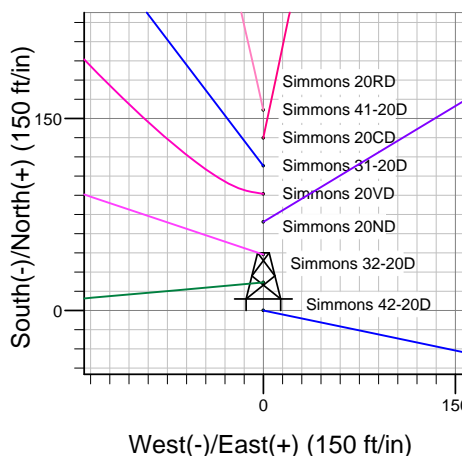
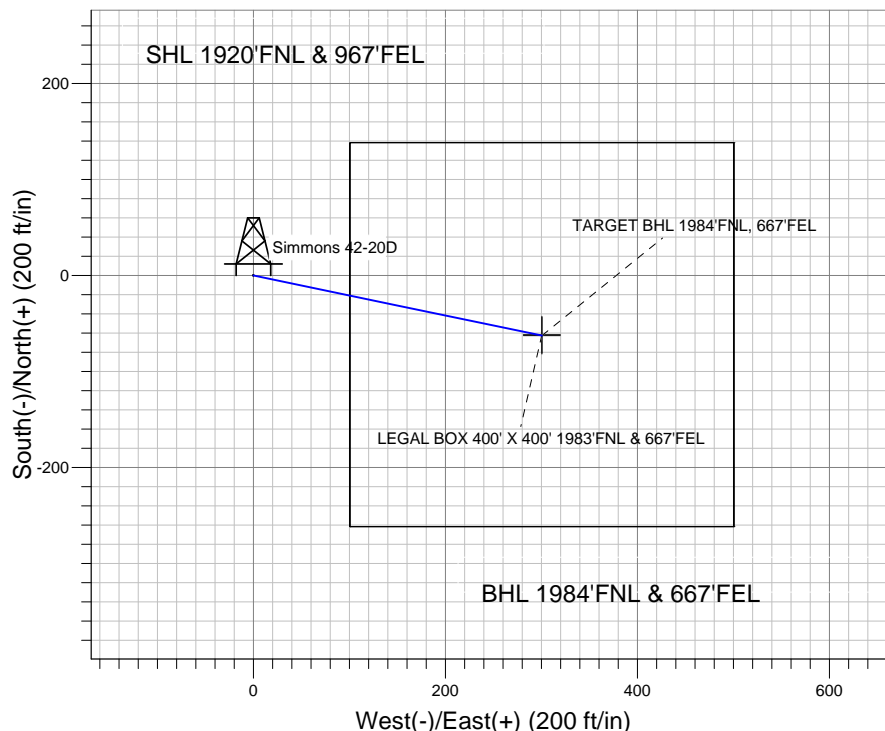
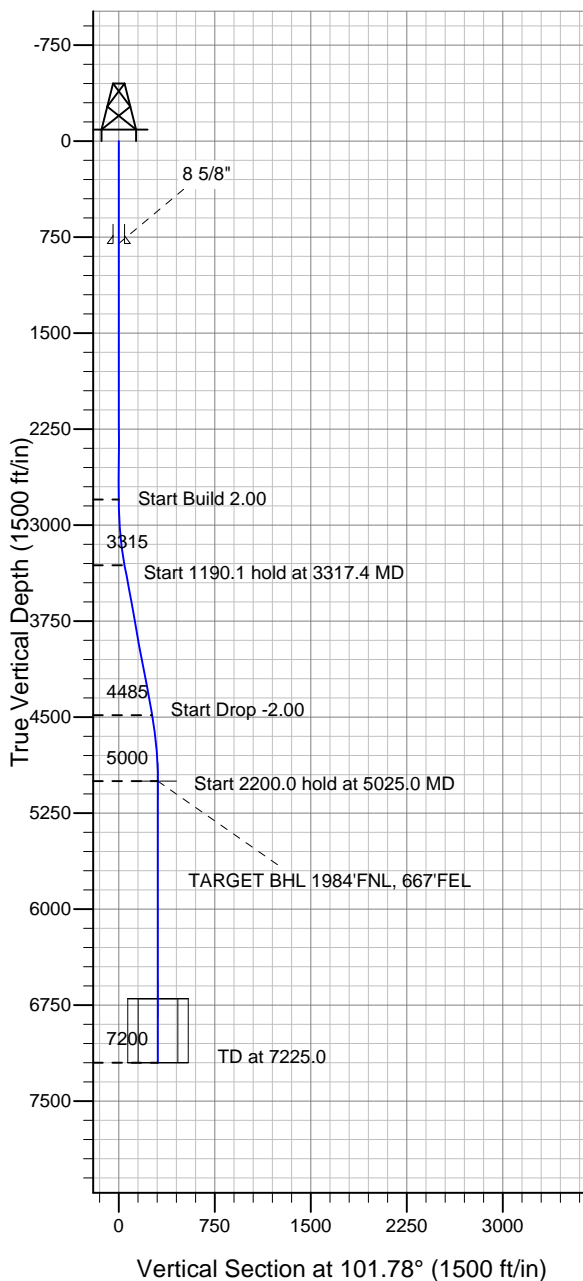
Well Name: Simmons 42-20D

Surface Location: Simmons 42-20D Pad Sec.20-T6N-R64W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

Ground Elevation: 4760.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1416687.92 3259268.88 40° 28' 24.492 N 104° 34' 5.016 W
Original Well Elev WELL @ 4773.0ft (Original Well Elev)

PETROLEUM DEVELOPMENT CORP Weld County CO



Simmons 42-20D Pad Sec.20-T6N-R64W
Simmons 42-20D
Plan #1 (1-06-11)
9:54, January 18 2011



Azimuths to True North
Magnetic North: 8.82°

Magnetic Field
Strength: 53234.5nT
Dip Angle: 67.16°
Date: 1/18/2011
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1984'FNL, 667'FEL	5000.0	-62.7	300.5	40° 28' 23.873 N	104° 34' 1.127 W	Point
LEGAL BOX 400' X 400' 1983'FNL & 667'FEL	6700.0	-61.7	300.5	40° 28' 23.882 N	104° 34' 1.128 W	Rectangle (Sides: L400.0 W400.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2800.0	0.00	0.00	2800.0	0.0	0.0	0.00	0.00	0.0	
3	3317.4	10.35	101.78	3314.6	-9.5	45.6	2.00	101.78	46.6	
4	4507.5	10.35	101.78	4485.4	-53.2	254.9	0.00	0.00	260.4	
5	5025.0	0.00	0.00	5000.0	-62.7	300.5	2.00	180.00	307.0	TARGET BHL 1984'FNL, 667'FEL
6	7225.0	0.00	0.00	7200.0	-62.7	300.5	0.00	0.00	307.0	